E05 Meeting

2015/10/20

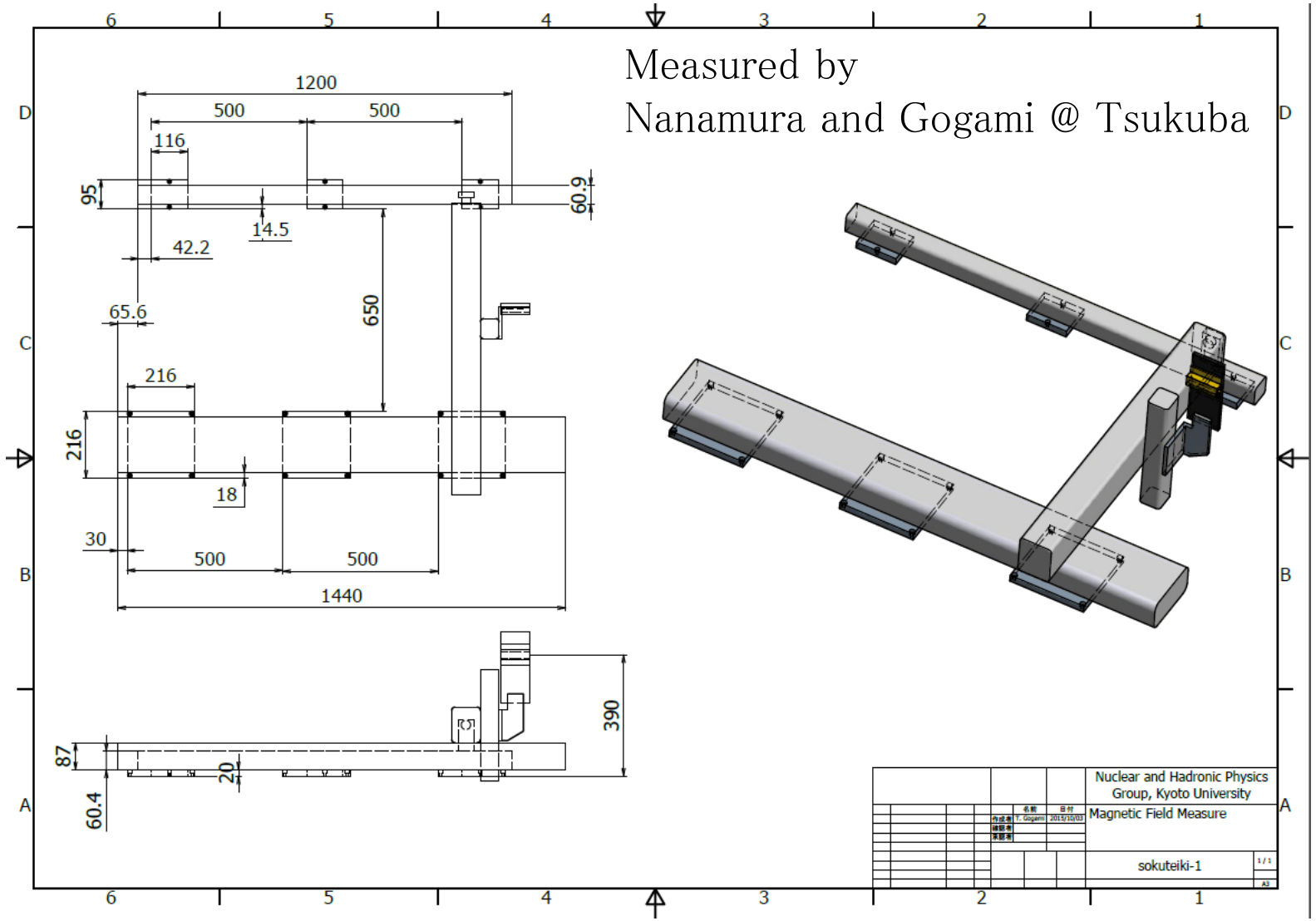
Toshiyuki Gogami

Contents

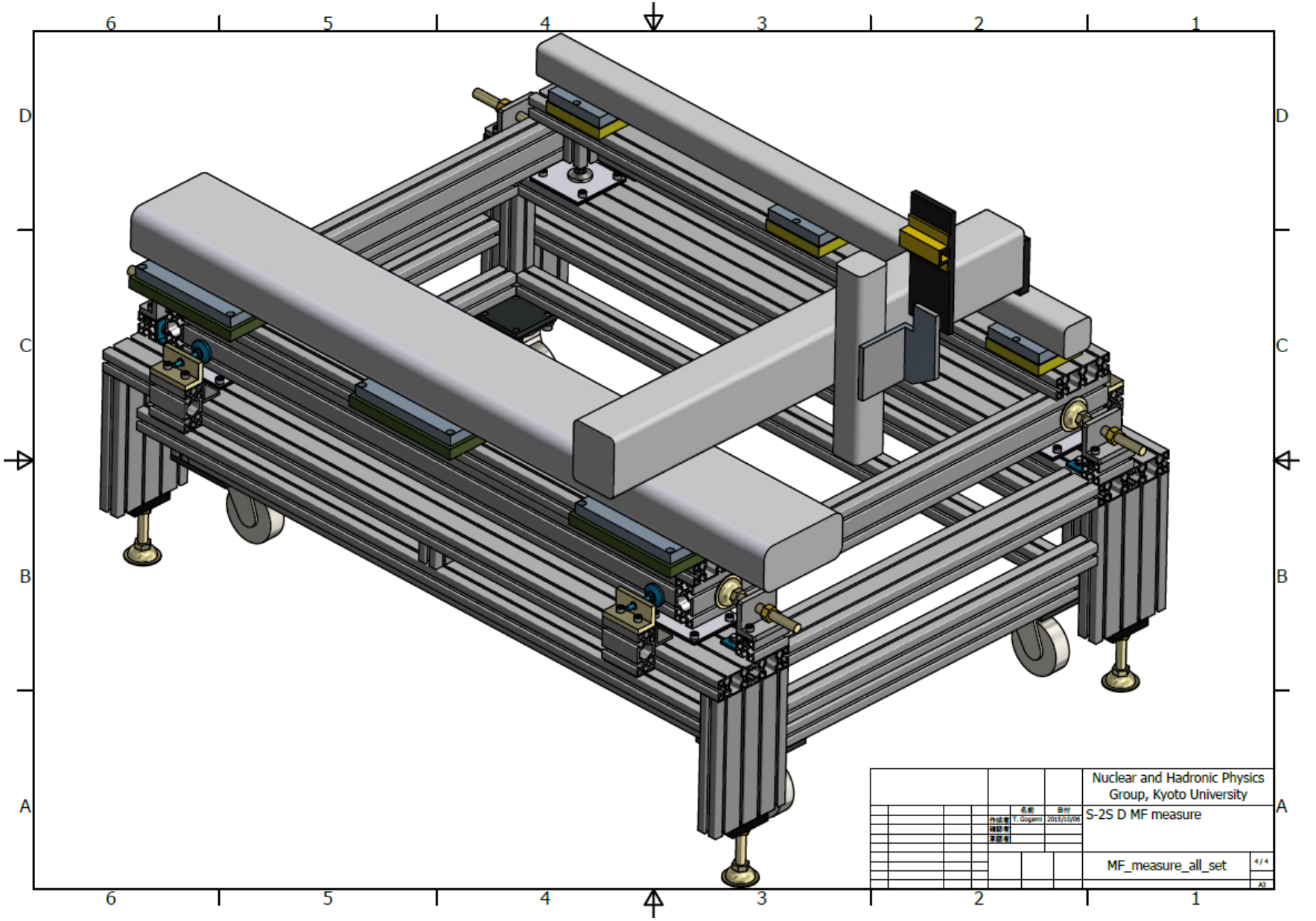
In preparation for MF measurement of S-2S D

Design of base

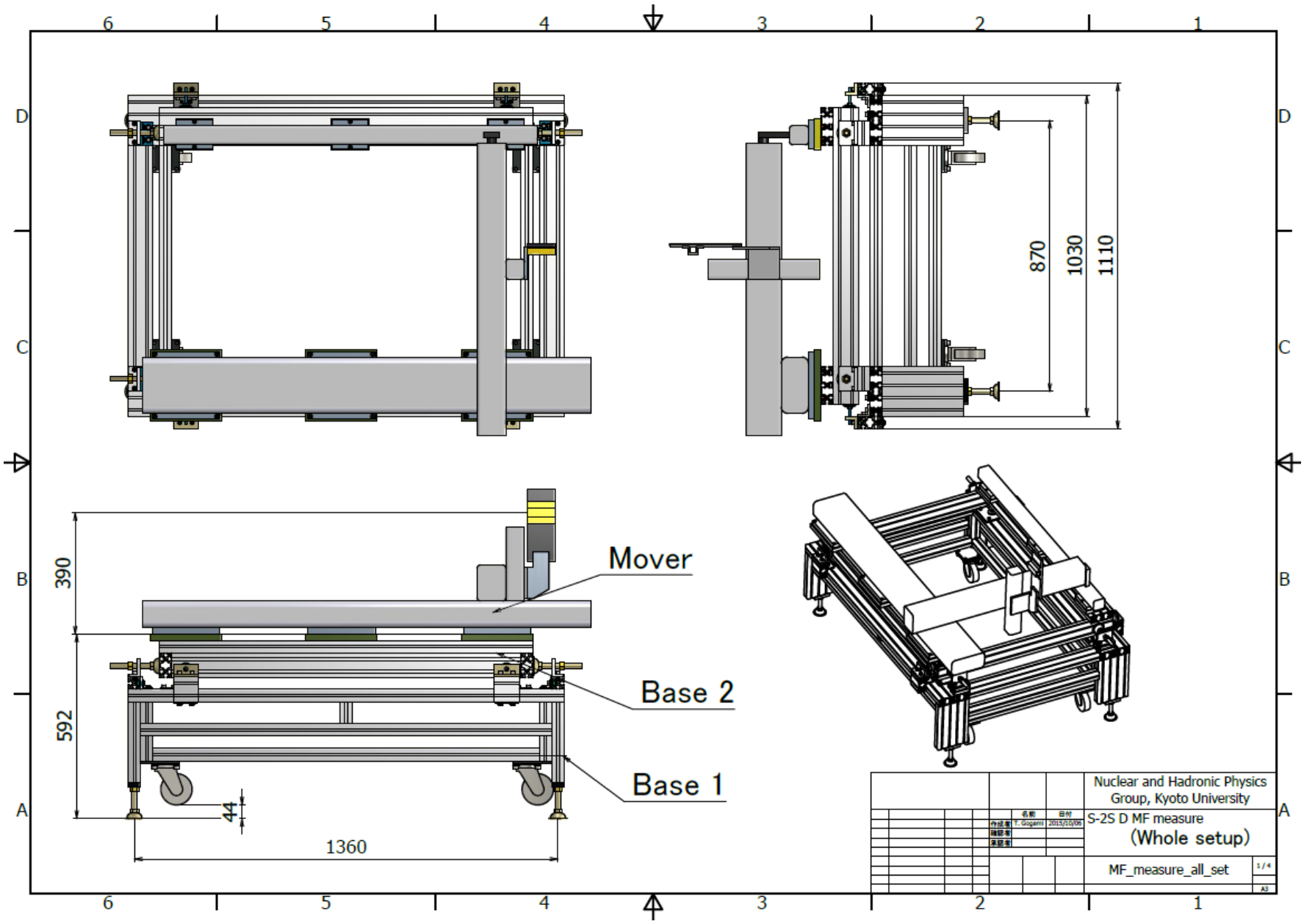
Measured the size of mapper (2015/10/1)



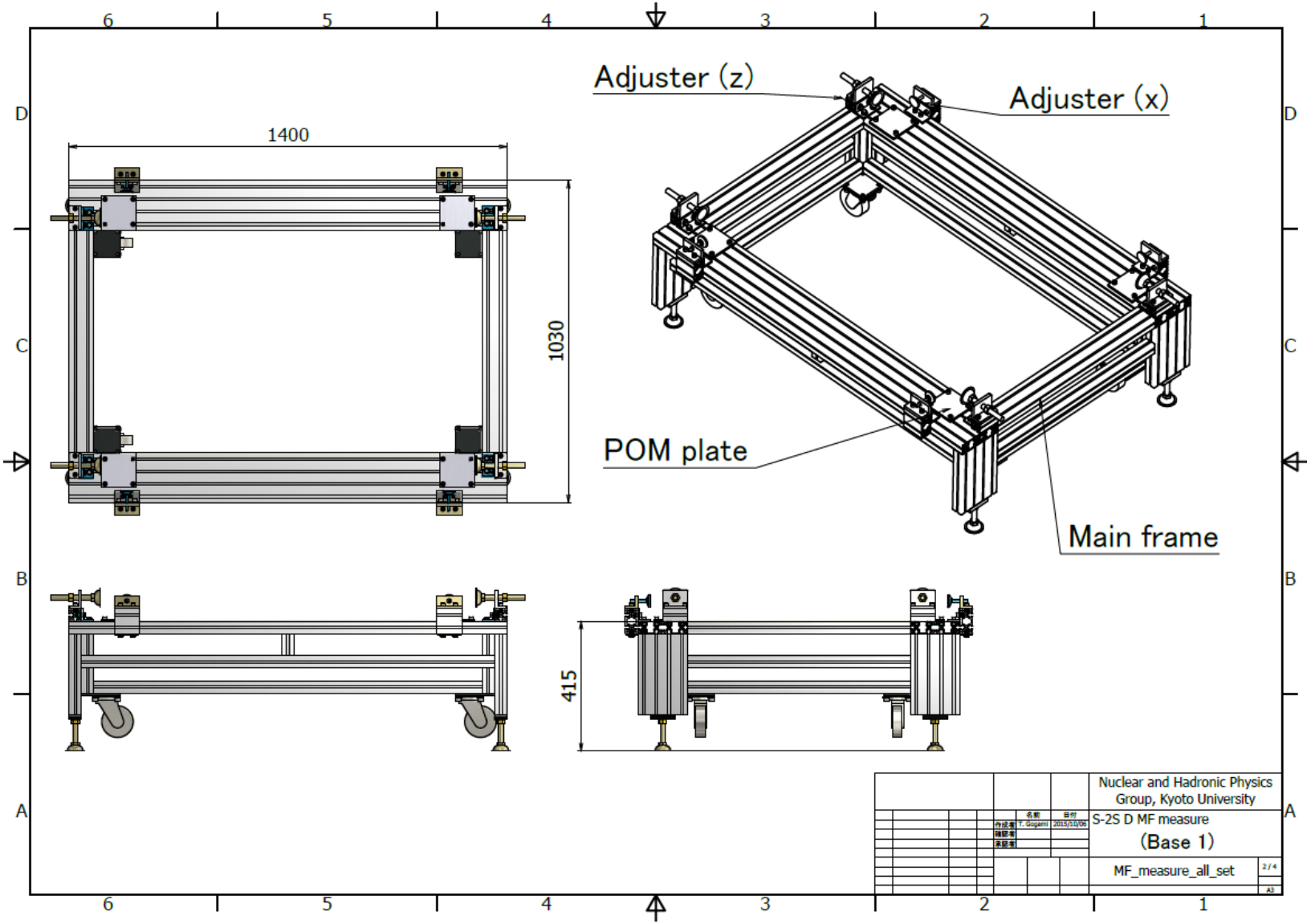
Preliminary design of table



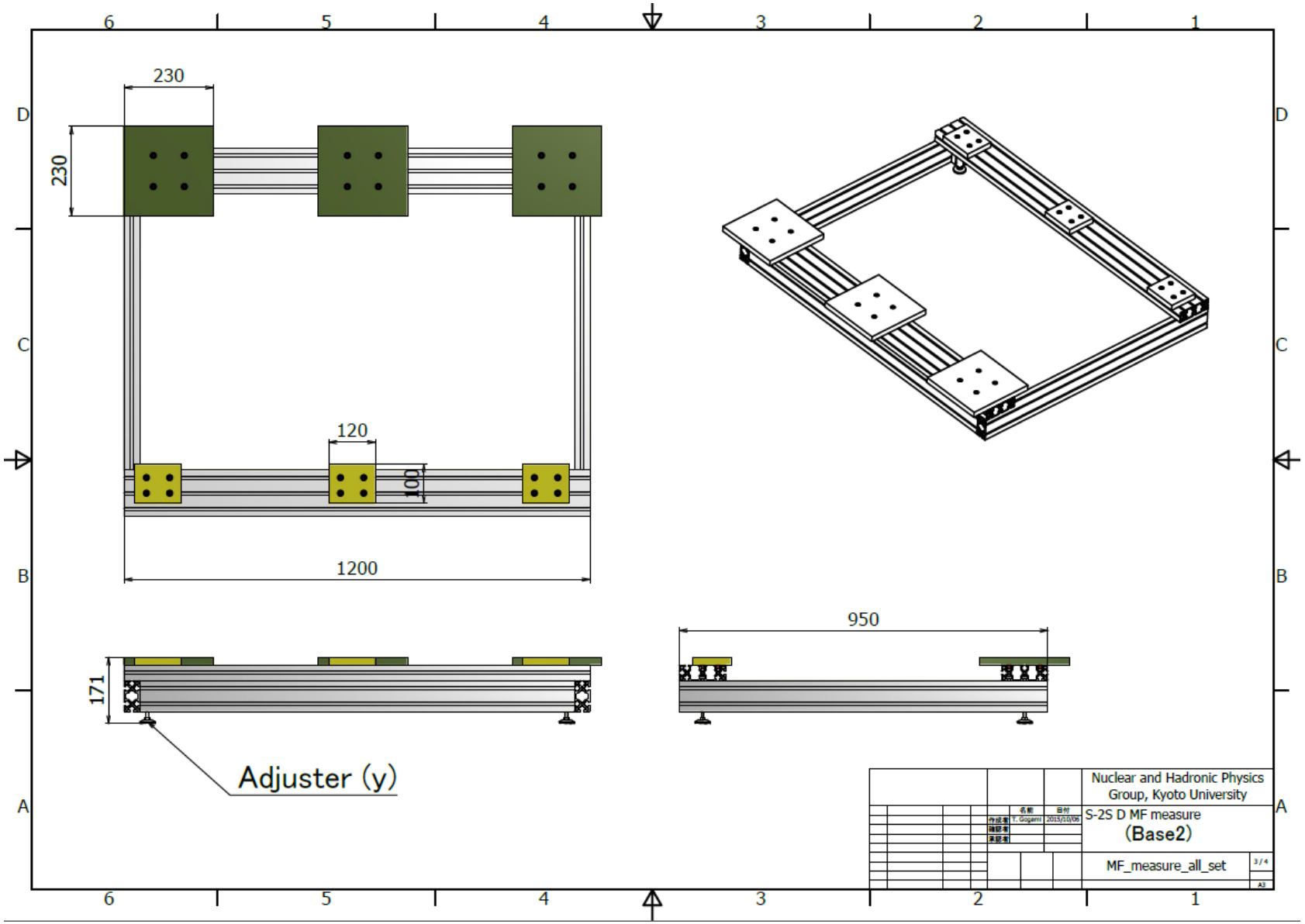
Mover (mapper) + Base1,2



BASE1
(Rough level adjuster + fine xz adjuster)



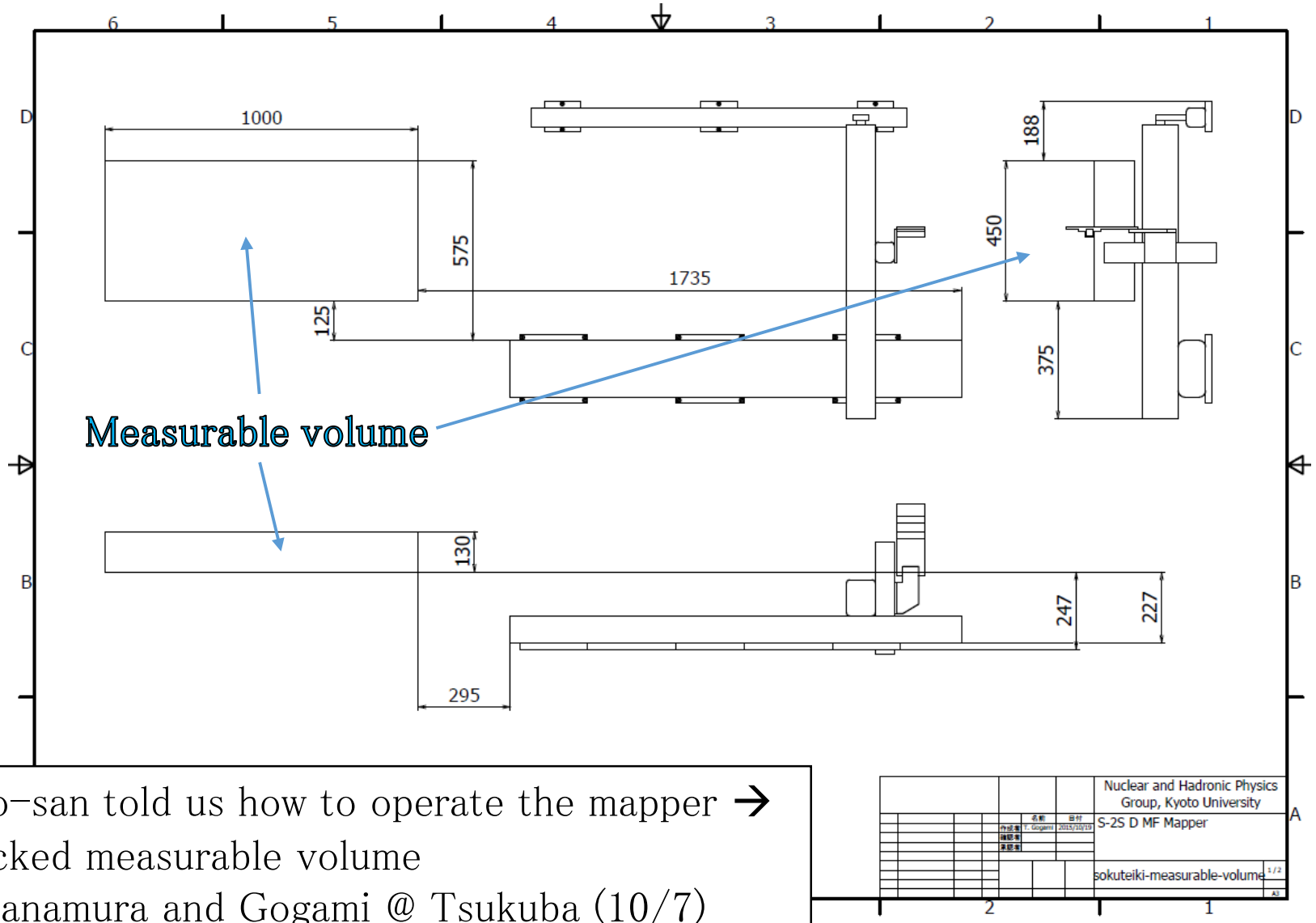
BASE2 (Fine level adjuster)



Where can the mapper measure ?
(relative to the designed base)

Measurable volume of the mapper

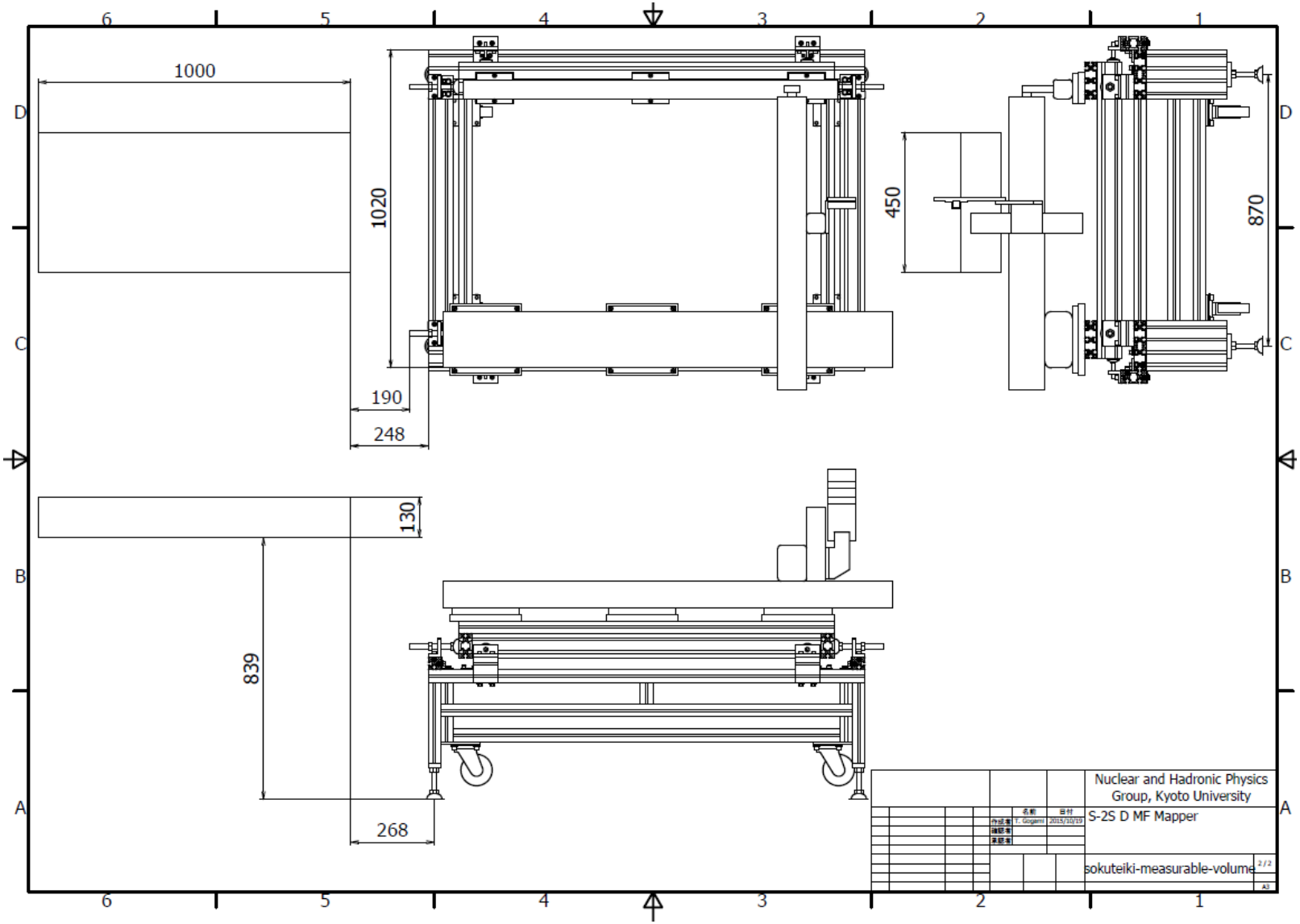
(with 1500 mm bar)



Muto-san told us how to operate the mapper →
Checked measurable volume
by Nanamura and Gogami @ Tsukuba (10/7)

Measurable volume of the mapper

(with 1500 mm bar)



Soleplate

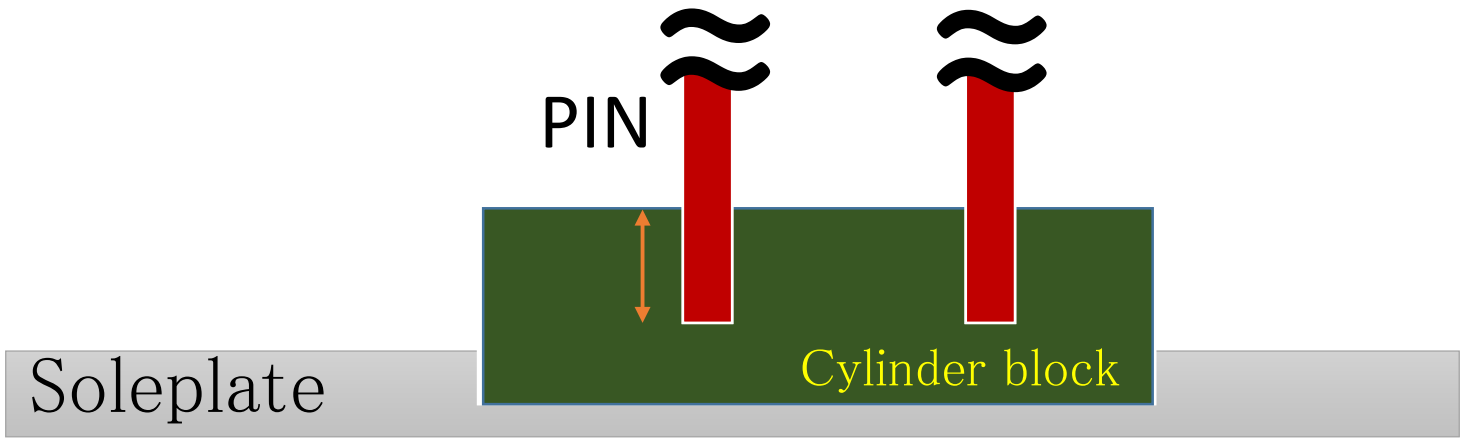
a. Relative position of the mapper to measurable volume
b. Measure points we want to measure

→Soleplate

Soleplate

2週間くらいで届くかチェック!!
→ 七村君お願いします

- Material: Aluminum
- 1500 × 2000 mm^2 with 30 mm thickness
  - ✓30 mm thickness might not be necessary (By Hitoshi-san)
  - ✓スズノ技研、ミスミ(材料費のみで1枚60万円程度との見積)
  - ✓ Two or One ?
- Hole positions for pins



Three-Axis Probes

Hall probe and its readout

Model 460 3-Channel Gaussmeter

Front Panel Back Panel

Model 460 Features

- Displays each axis simultaneously
- Vector magnitude reading
- Resolution to 5¾ digits (1 part out of ±300,000)
- Accuracy to ±0.10% of reading
- Peak capture
- Analog voltage outputs
- IEEE-488 and serial interface
- Can be operated with three individual probes, a single 2-axis probe and one individual probe, or a single 3-axis probe
- CE mark certification

Hall Probe and its readout

これでいいですか？

From Muto-san (2015/10/7) :

武藤です。
3軸ホールプローブの情報は

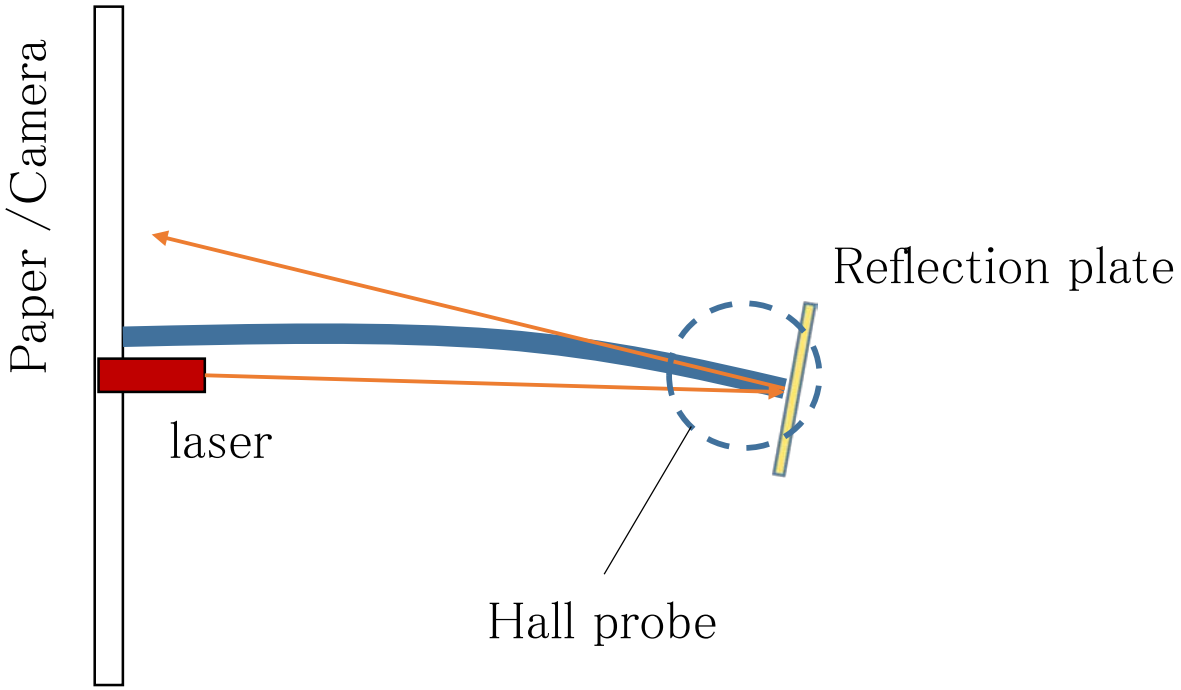
http://www.lakeshore.com/products/hall-probes/multi-axis-probes/pages/Specifications.aspx

にあります。
読み出しは

http://www.lakeshore.com/products/gaussmeters/model-460-3-channel-gaussmeter/Pages/Overview.aspx

Tawami (Flexure) measurement

Need to know flexure → Flexure calibration



This calibration can be done before/after the magnetic field measurement

上流側に関して